

What is Claimed:

1. An electromagnetic fuel pump, comprising:

a pump;

5 electronic switching circuitry for controlling an electromagnetic coil operatively arranged

to operate said pump; and,

a housing arranged to house said pump and said coil, said housing comprising an integral

inlet port and outlet port.

2. The electromagnetic fuel pump recited in Claim 1 further comprising a drive circuit

10 housed within said housing, said drive circuit operatively arranged to drive said coil.

3. The electromagnetic fuel pump recited in Claim 2, wherein said drive circuit further

comprises a Zener diode operatively arranged as a surge suppressor.

4. The electromagnetic fuel pump recited in Claim 1, wherein said housing further
comprises at least one mounting flange.

15 5. The electromagnetic fuel pump recited in Claim 1, wherein said housing further
comprises a molded body.

6. The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further
comprises an integral nipple, operatively arranged for coupling with an inlet fuel hose.

7. The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further
20 comprises a threaded insert.

8. The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an inlet fuel hose coupling nipple.

9. The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises an integral nipple, operatively arranged for coupling with an outlet fuel hose.

5 10. The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises a threaded insert.

11. The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an outlet fuel hose coupling nipple.

10 12. The electromagnetic fuel pump recited in Claim 1 wherein said housing further comprises a structural EM hardening means.

13. The electromagnetic fuel pump recited in Claim 12 wherein said structural EMI hardening means comprises a metal shield within said housing.

15 14. The electromagnetic fuel pump recited in Claim 13 wherein said metal shield comprises a metal screen within said housing.

15. The electromagnetic fuel pump recited in Claim 13 wherein said metal shield comprises a metallic conformal coating within said housing.

16. The electromagnetic fuel pump recited in Claim 1 further comprising electronic switching circuitry mounted on a printed circuit board within said housing, and said 20 electromagnetic coil is mounted on a bobbin assembly fixedly secured to said printed circuit board.

17. The electromagnetic fuel pump recited in claim 16 wherein said bobbin assembly comprises a pair of opposing flanges, and one of said flanges is fixedly secured to said printed circuit board.

18. The electromagnetic fuel pump recited in claim 17 wherein one of said flanges is fixedly secured to said printed circuit board and the other said flange is arranged to rest upon said printed circuit board.

19. An electromagnetic fuel pump, comprising:

a pump;

electronic switching circuitry for controlling an electromagnetic coil operatively arranged

10 to operate said pump; and,

a two piece housing operatively arranged to house said pump and said coil, said two piece

housing comprising a first material,

wherein a first piece of said two piece housing comprises a threaded insert inlet port and

a second piece of said two piece housing comprises a threaded insert outlet port; said threaded

15 insert inlet and outlet ports comprising a second material.